

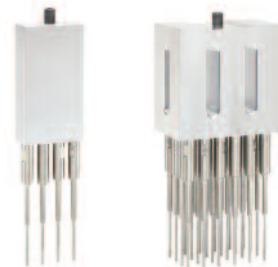
## MULTI-ELEMENT PROBES

The high throughput multi-element probes increase productivity and minimize repetitive tasks by processing identically numerous samples simultaneously. They screw into the converter in place of the standard  $\frac{1}{2}$ " (13 mm) probe, and can be used either manually or with automated systems. The energy delivered by each tip is uniform within 2%. With the four, eight, and twenty four-element probes, the spacing between the tips (center to center) is  $\frac{22}{32}$ " (18 mm) and the length of the special microtips is  $5\frac{7}{16}$ " (139 mm). With the twelve-element probe the spacing between tips (center to center) is 1" (25 mm) and the length of the probe is  $5\frac{13}{32}$ " (113 mm). With the ninety-six element probe, spacing between the tips (center to center) is  $\frac{11}{32}$ " (9 mm) and the length of the mini microtips is  $\frac{11}{16}$ " (17 mm). With the four, eight and twenty four-element probes, the diameter of the special microtips is  $\frac{1}{8}$ " (3 mm). With the twelve-element probe, the diameter of the probe is  $\frac{1}{4}$ " (6 mm). With the ninety-six element probe the diameter of the mini microtip is  $\frac{5}{64}$ " (2 mm). Multi-element probes are fabricated from titanium alloy Ti-6Al-4V and are autoclavable. Connecting stud  $\frac{1}{2}$  - 20. Available with  $\frac{3}{8}$  - 24 adapting stud to enable connection to a 20 kHz converter not manufactured by Sonics.

*Note: Custom formatted multi-element probes are available upon request.*

## MULTI-ELEMENT PROBES

PART NO.	DESCRIPTION	ULTRASONIC PROCESSOR
630-0559	Four-element probe	500 watt or 750 watt
630-0660	Consists of an aluminum coupler and four $\frac{1}{8}$ " (3 mm) special microtips. Replacement microtip (250 $\mu$ l – 10 ml) for four-element probe	
630-0586	Eight-element probe	500 watt or 750 watt
630-0660	Consists of an aluminum coupler and eight $\frac{1}{8}$ " (3 mm) special microtips. Replacement microtip (250 $\mu$ l – 10 ml) for eight-element probe	
630-0646	Twelve-element probe	500 watt or 750 watt
630-0435	Consists of an aluminum coupler and twelve $\frac{1}{4}$ " (6 mm) probes. Replacement probe (10 – 50 ml) for twelve-element probe	
630-0579	Twenty-four-element probe*	750 watt
630-0660	Consists of an aluminum coupler and twenty-four $\frac{1}{8}$ " (3 mm) special microtips. Replacement microtip (250 $\mu$ l – 10 ml) for twenty-four-element probe	
630-0611	Ninety-six-element probe*	500 watt or 750 watt
630-0599	Consists of an aluminum coupler and ninety-six $\frac{1}{16}$ " (17 mm) mini microtips. Replacement mini microtip (1 – 2 ml) for ninety-six-element probe	



\*For use with 2 ml well microplates. Not recommended for use with microplate wells smaller than 1 ml.

## HEAVY DUTY MULTI-ELEMENT PROBE SUPPORT ASSEMBLY

Supports the converter and multi-element probe with minimum deflection. Recommended when working with twenty-four and ninety-six element probes.

Base: 10" x 10" (254 x 254 mm). Height: 24" (610 mm). Part No. 830-00320

## SOUND ABATING ENCLOSURE

Even though ultrasonic vibrations are above the human audible range, ultrasonic processing produces a high pitched noise in the form of harmonics which emanate from the vessel walls and the fluid surface. The sound abating enclosure permits extended processing without discomfort by reducing the sound by 35db. The probe/converter assembly is supported by the converter clamp, and the converter cable is fed through the  $\frac{3}{4}$ " (19 mm) opening at the top. Side access ports accommodate the tubing delivering the coolant and the sample to the processing vessel while the door is closed. The unit is faced on the exterior with white laminate, and on the interior with white waterproof polyethylene noise abating material. The transparent access door permits observation during treatment and protects the operator against accidental splashing. Support rod and light duty converter clamp are included. Outside dimensions: (H x W x D) 30" x 14" x 14" (762 x 355 x 355 mm).

Inside dimensions: (H x W x D) 27" x 11" x 11" (686 x 280 x 280 mm).

Part No. 630-0427



## LABORATORY JACK

Provides adjustable elevation from  $2\frac{1}{2}$ " (64 mm) to 10" (254 mm).

Top plate: 6" x 5" (152 x 127 mm).

Part No. 830-00113



## NON-SLIP VIBRATION ISOLATING MAT

Holds beakers and microplates securely in place, and reduces noise by absorbing vibrations normally transmitted to the laboratory jack.

4" x 7" (100 x 175 mm).

Part No. 830-00119



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